

8 White Winter News



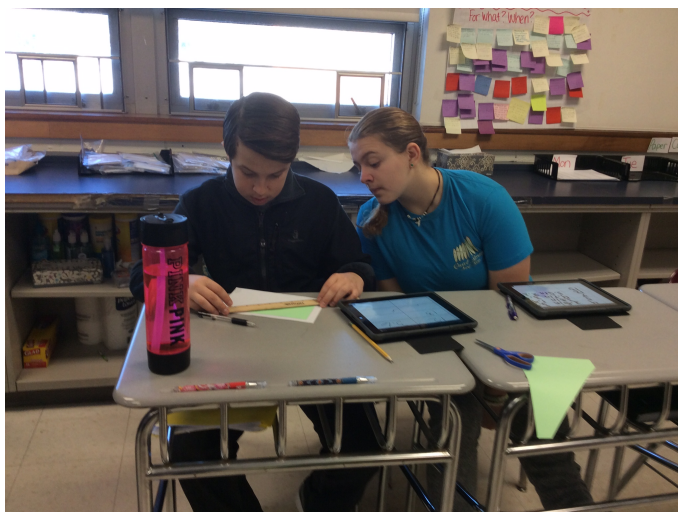
MATH

In January, our main focus question was:

HOW CAN WE DETERMINE THE DISTANCE BETWEEN TWO POINTS?

Students brainstormed reasons why would anyone need to determine distance between 2 points and these are several of their ideas:

- ❑ For architects and builders to know lengths of boards and material
- ❑ When traveling between two cities
- ❑ In medicine, like in surgeries and procedures



We focused on a method established long ago by Pythagoras, a Greek philosopher and mathematician. Students explored right triangles and we arrived at the idea that there exists a relationship between all 3 sides. Students measured and calculated the sides of all different types of right triangles (See picture). We spent many days applying the theorem to all different kinds of word problems and real life scenarios. Students wrote their own word problems and put them on booklets that we hung up in the hall for everyone to see and try out. I was very impressed with the creativity and imagination that students demonstrated in writing their own scenarios!

We also covered rational and irrational numbers in this unit. Students got to learn about numbers such as pi and $\sqrt{2}$, which NASA has approximated to about 30 pages of decimal points. To further develop number sense, we worked on estimating the square roots of numbers and placing them on a number line. We made a human number line in each class, where students were different types of numbers like decimal, fractions, rational and irrational numbers.

On February 10th we had the math placement test. This is a 75-minute paper test that will cover material we have learned from the start of 8th grade to this last unit on geometry. It will be a big factor in determining the most appropriate 9th grade math level for each student. The test is meant to measure a student's retention skills



and how well they have mastered the math skills from this year that they will need to know in 9th grade math with little review. It is my ultimate goal to place your child in a class where the pace and difficulty will not be overwhelming, but be a class where your child will continue to increase their knowledge and confidence in math.

History

January and February have been busy in World History. First off we've welcomed Mr. Cola into our class as a student teacher. Mr. Cola is an aspiring teacher who is currently attending Assumption College in Worcester. He's already built a great rapport with our students and has quickly acclimated to life on 8 White!

After finishing our unit on Islam we've begun our studies on the Middle Ages. We started by studying a barbaric tribe known as the Franks and one of their early leaders, Clovis. Clovis was just 15 years old when he started uniting Frankish tribes across Western Europe. We then studied about Charles "The Hammer" Martel and his grandson, Charlemagne, who is arguably the greatest king of the Middle Ages. We culminated our studies of the Franks by studying about Charlemagne's three grandsons, who we've nicknamed "The Three Idiots". These three rulers fought amongst themselves and cared about who would hold the largest chunk of the Frankish kingdom rather than deal with barbaric attacks on their empire. It led to the Franks' demise.

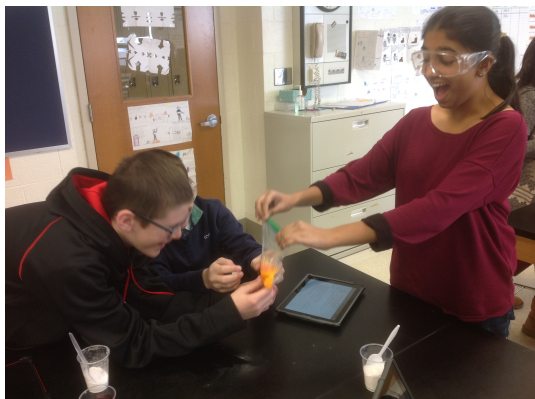
We're currently studying about Feudalism. "Feudalism was a social and political system that was based on granting land in return for loyalty that helped create order in society". This is a definition that we've drilled "old school style" as the students say. It's not something we normally do but in this case it's a fun way to remember what Feudalism is. Ask your child if they can recite the definition of Feudalism! One activity that Mr. Cola created was for students to create their own Coat of Arms. We studied what symbols had particular meanings during the Middle Ages. Students were to create a Coat of Arms with three symbols that represent them today and one



Medieval symbol that represents them. We'll continue studying the levels of Feudal society and how each level played an important role in the Middle Ages.

Science

January and February have been very busy months in science! Students wrapped up our last chemistry unit and have begun our first physics unit.



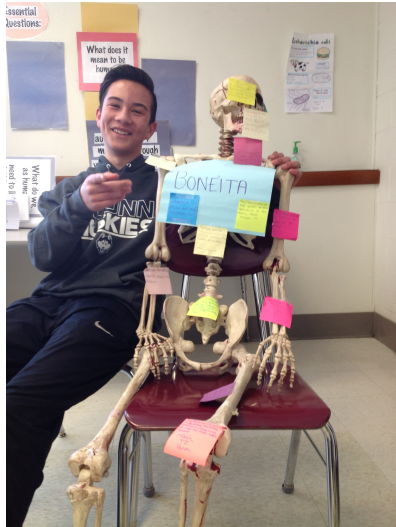
January focused on understanding the differences between physical and chemical changes. Students learned about how thermal expansion can effect the arrangement of particles in a solid, liquid, and gas. Additionally, they carried out several chemical reactions to observe common signs of a chemical reaction (see photos). They also designed and carried out their own investigation to better understand the Law of Conservation of Mass. Try asking your child about what the law states and what is the best way to prove it is true.

February has seen us switch gears entirely. The remainder of the school year will be spent investigating different topics in physics. Currently, we are studying how to describe the motion of an object in terms of position, direction, and speed. We've watched several videos that helped us to better understand how we use reference points to decide that an object is in motion. Ask your child to show you the Mythbusters "Frame of Reference" video or the B-2 bomber re-fueling in mid-air! This past week students observed the 2008 record-breaking performance of Usain Bolt in the 100-meter dash to tease out the difference between instantaneous, constant, and average speed. They will then apply their new understanding to compete in the 8 White Speed Olympics to calculate their own speeds in different events.



English/Language Arts

What does it mean to be human? What is it that we humans need to live meaningful and fulfilling lives? We explored these questions through two science fiction novels. Some of us read The Giver by Lois Lowry, and others read Fahrenheit 451 by Ray Bradbury. Both novels are dystopian societies in which the citizens are unaware of all that is wrong.



Although the books were written decades apart, they both ask us to consider what it means to fully embrace all the emotions of being human. I structured the unit so the students could experience the novel in a variety of ways. We worked on persuasive writing skills by writing a journal from the point of view of one of the characters. Some of your children are quite skilled in the art of written persuasion! We spent quite a bit of time learning about, and understanding theme. Theme is a difficult concept to fully grasp, but we completed several activities to help us break down the pieces of how an author develops themes within a novel. We then built our understanding by looking closely at key passages from each novel that helped develop the theme. We also examined the symbols in the novel and discussed how and why symbols are effective literary

devices to help authors develop theme.

With assistance from our friendly class skeleton, “Bone”ita, we deepened our understanding of the pieces needed to develop a well written analytical essay. Not only did “Bone”ita help us, but we also took part in a team wide peer editing session to help each other. During the peer editing session we were able to both give and receive targeted, constructive feedback from our peers about our essays. The two snow days did not hold us back! I was impressed with the commitment from your children to “plow” through the work in spite of the snow days. I even assigned work on the snow days, and the majority of your children got it done! We finished off the unit by watching the newly released version of *The Giver* movie, and compared the movie to the novel.

